

AMENDMENTS TO THE CLAIMS

Claims 1–23, and 26-48 were pending at the time the Office Action was issued.

Claims 1, 12, 23, 26, 31-33, and 43 have been amended.

1. **(Currently Amended)** A method comprising:

collecting, on a computer maintained within a vehicle, data from a plurality of systems of the vehicle, wherein the plurality of systems comprises:

a diagnostics system for providing one or more diagnostic codes; and at least one of a vehicle security system, an obstacle detection system, a vehicle media system, a vehicle environment system, or a vehicle sound system, wherein each vehicle system is connected to the computer by a respective interface; and

generating, on the computer, an explanation of a vehicle condition based on at least one said vehicle diagnostics code comprising a set of symbols, wherein the explanation combines data collected from the diagnostic system with data collected from at least one other vehicle system at the time the one or more diagnostic codes are detected.
2. **(Original)** A method as recited in claim 1 wherein the generating operation comprises retrieving a textual explanation of the vehicle diagnostics code.

3. **(Original)** A method as recited in claim 1 wherein the generating operation comprises retrieving a graphical illustration of a component associated with the vehicle diagnostics code.
4. **(Original)** A method as recited in claim 1 further comprising generating supplemental information related to the vehicle diagnostics code.
5. **(Original)** A method as recited in claim 4 wherein the generating supplemental information operation comprises retrieving an estimated price for repairing a condition related to the vehicle diagnostics code.
6. **(Original)** A method as recited in claim 4 wherein the generating supplemental information operation comprises retrieving a location of a vehicle dealership.
7. **(Original)** A method as recited in claim 1 further comprising presenting the explanation at a client computer.
8. **(Original)** A method as recited in claim 7 wherein the presenting operation comprises presenting the explanation at a local, vehicle-based client.

9. **(Original)** A method as recited in claim 7 wherein the presenting operation comprises presenting the explanation at a remote client.

10. **(Original)** A method as recited in claim 1 further comprising storing an updated explanation of the vehicle condition in a memory.

11. **(Original)** A method as recited in claim 1 further comprising transmitting the vehicle diagnostics code to a remote computer.

12. **(Currently Amended)** A computer-readable medium having stored thereon a computer program having executable instructions for performing a process comprising:

collecting, on a computer maintained within a vehicle, data from a plurality of systems of the vehicle, wherein the plurality of systems comprises:

a diagnostics system providing one or more diagnostic codes, and

at least one of a vehicle security system, an obstacle detection system, a vehicle media system, a vehicle environment system, or a vehicle sound system;
and

generating a deciphered an explanation of at least one said vehicle diagnostics code, wherein the explanation combines data collected from the diagnostics system with data collected from at least one other vehicle system at the time the one or more diagnostic codes are detected.

13. **(Original)** A computer-readable medium as recited in claim 12 wherein the generating operation comprises generating a textual explanation of the vehicle diagnostics code.

14. **(Original)** A computer-readable medium as recited in claim 12 wherein the generating operation comprises generating a graphical illustration of a component associated with the vehicle diagnostics code.

15. **(Original)** A computer-readable medium as recited in claim 12, the process further comprising generating supplemental information related to the vehicle diagnostics code.

16. **(Original)** A computer-readable medium as recited in claim 15 wherein the generating supplemental information operation comprises generating an estimated price for repairing a condition related to the vehicle diagnostics code.

17. **(Original)** A computer-readable medium as recited in claim 15 wherein the generating supplemental information operation comprises generating a location of a vehicle dealership.

18. **(Original)** A computer-readable medium as recited in claim 12, the

process further comprising presenting the deciphered explanation at a client computer.

19. **(Original)** A computer-readable medium as recited in claim 18 wherein the presenting operation comprises presenting the deciphered explanation at a local, vehicle-based client.

20. **(Original)** A computer-readable medium as recited in claim 18 wherein the presenting operation comprises presenting the deciphered explanation at a remote client.

21. **(Original)** A computer-readable medium as recited in claim 12, the process further comprising updating the deciphered explanation of the vehicle diagnostics code.

22. **(Original)** A computer-readable medium as recited in claim 12, the process further comprising:

transmitting the vehicle diagnostics code to a remote computer;

looking up the deciphered explanation in an explanations store in operable communication with the remote computer, the explanations store having one or more explanations associated with one or more associated diagnostics codes.

23. **(Currently Amended)** A vehicle comprising:

a vehicle diagnostic system;

one or more other vehicle systems; [[and]]

a host computer communicatively coupled to the vehicle diagnostic system and the one or more other systems via respective interfaces, wherein the host computer is configured to:

collect data from a plurality of said vehicle systems; and

generate a deciphered explanation of a vehicle diagnostics code, wherein the deciphered explanation contains a textual explanation of the vehicle diagnostic code and a graphical illustration of a component associated with the vehicle diagnostic code; and

a local client maintained within the vehicle, wherein the local client displays the deciphered explanation.

24. **(Cancelled)**

25. **(Cancelled)**

26. **(Currently Amended)** A vehicle as recited in claim 23, wherein the host computer is further operable to generate supplemental information related to the vehicle diagnostics code.

27. **(Original)** A vehicle as recited in claim 26, wherein the supplemental information comprises an estimated price for repairing a condition related to the vehicle diagnostics code.

28. **(Original)** A vehicle as recited in claim 26 wherein the supplemental information comprises a location of a vehicle dealership.

29. **(Original)** A vehicle as recited in claim 23 further comprising a display device presenting the deciphered explanation.

30. **(Original)** A vehicle as recited in claim 23, further comprising an audio output device presenting an audio version of the deciphered explanation.

31. **(Currently Amended)** A vehicle as recited in claim 29, wherein the host computer transmits the deciphered explanation to a remote client computer for presentation at the remote client.

32. **(Currently Amended)** A vehicle as recited in claim 23, wherein the host computer comprises an updateable repository of one or more deciphered explanations associated with one or more vehicle diagnostics codes.

33. **(Currently Amended)** A vehicle-based system comprising:

a diagnostics receiver module receiving a vehicle diagnostics code from a vehicle diagnostics system, the vehicle diagnostics code including a set of one or more symbols and corresponding to a vehicle condition;

one or more interfaces corresponding to one or more other vehicle systems and configured to receive vehicle systems data from a respective vehicle system;
[[and]]

means for generating an explanation of the vehicle condition based on the vehicle diagnostics code, wherein the explanation combines data received from the vehicle diagnostics system and at least one said other vehicle system, wherein the explanation contains a textual explanation of the vehicle condition and a graphical illustration of a component associated with the vehicle condition, and

means for presenting the explanation of the vehicle condition, wherein the presentation means comprises a local client.

34. **(Original)** A vehicle-based system as recited in claim 33 wherein the means for generating comprises a computer-readable memory storing a diagnostics information registry having a field storing a reference to the explanation.

35. **(Original)** A vehicle-based system as recited in claim 33 wherein the means for generating comprises a memory storing explanations of one or more

predetermined vehicle diagnostics codes.

36. **(Original)** A vehicle-based system as recited in claim 35 wherein the memory stores one or more of a graphical explanation, a textual explanation, and an audio explanation.

37. **(Original)** A vehicle-based system as recited in claim 33 further comprising a network communications module communicating the explanation over a network.

38. **(Original)** A vehicle-based system as recited in claim 33 further comprising a media output device presenting the explanation.

39. **(Original)** A vehicle-based system as recited in claim 38 wherein the media output device comprises audio speakers outputting an audio explanation.

40. **(Original)** A vehicle-based system as recited in claim 34 further comprising an update module updating information in the diagnostics information registry.

41. **(Original)** A vehicle-based system as recited in claim 34 wherein the diagnostics information registry comprises:

a severity field storing a severity level associated with the vehicle condition;

a component field storing a component identifier associated with the vehicle condition;

a type field storing a diagnostics code type associated with the vehicle diagnostics code;

an automatic field storing an indicator indicating whether to automatically present the explanation;

an graphics field storing an indicator indicating whether to present graphics data included in the explanation.

42. **(Original)** A vehicle-based system as recited in claim 33 wherein the vehicle diagnostics code is an onboard diagnostics II (OBDII) code.

43. **(Currently Amended)** A method comprising:

receiving, on a vehicle based computer, a vehicle diagnostics code from a vehicle diagnostics system, the vehicle diagnostics code including a set of one or more symbols and corresponding to a vehicle condition;

receiving vehicle systems data from one or more of a vehicle security system, an obstacle detection system, a vehicle media system, a vehicle environment system, or a vehicle sound system; and

retrieving an explanation of the vehicle condition based on the vehicle

diagnostics code; wherein the explanation combines data from the vehicle diagnostics system and at least one said other vehicle system at the time the one or more diagnostic codes are detected.

44. **(Original)** A method as recited in claim 43 wherein the retrieving operation comprises accessing a memory location storing an updateable explanation.

45. **(Original)** A method as recited in claim 44 further comprising updating the explanation.

46. **(Original)** A method as recited in claim 43 further comprising presenting the explanation automatically in response to receiving the vehicle diagnostics code.

47. **(Original)** A method as recited in claim 43 further comprising presenting the explanation in response to a request from a user.

48. **(Original)** A method as recited in claim 43 further comprising communicating the explanation over a network.